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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/731,096	12/05/2000	Gabe C. Gavrilu	448	9385

7590 03/24/2005  
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EXAMINER

ORTIZ RODRIGUEZ, CARLOS R

ART UNIT	PAPER NUMBER
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2125

DATE MAILED: 03/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

412

## Office Action Summary

Application No.

09/731,096

Applicant(s)

GAVRILA ET AL.

Examiner

Carlos Ortiz-Rodriguez

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 10 and 21 is/are rejected.
- 7) ☒ Claim(s) 2-9, 11-20, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/05/2000</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Objections*

1. Claims 2-9, 11-20 and 22-23 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 1 rejected under 35 U.S.C. 102(e) as being anticipated by Chen U.S Patent No. 6,338,032.

Regarding claim 1, Chen discloses a method for trimming a circuit device containing trim elements, the method comprising: applying, in an online mode of operation, one or more trim bit sequences to the circuit device (Abstract lines 1-7); evaluating, in said online mode of operation, the effect on the circuit device resulting from each of the trim bit sequences applied thereto, without physically altering any of said trim elements (FIG 1); determining, in said online mode of operation, one or more optimum trim bit sequences required to achieve a desired test results (C3 L6-16); and permanently adjusting, in an offline mode of operation, one or more trim

elements of the circuit device in accordance with the determined one or more optimum trim bit sequences (C3 L45-56 and C4 L16-25).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzmann et al. U.S. Patent No. 5,995,413 in view of Chen U.S Patent No. 6,338,032.

Regarding claim 10, Holzmann et al. discloses a trimming circuit for use in trimming a circuit device containing trim elements, the trimming circuit comprising: one or more trim elements(C2 L35-55); one or more trim bit subcircuits, each of said trim bit subcircuits being associated with one or more trim elements(Abstract L3-11).

But, Holzmann et al. fails to clearly specify and associated circuitry operative in online and offline modes of operation of said trimming circuit.

However, Chen discloses associated circuitry operative in online and offline modes of operation of said trimming circuit (C3 L6-16).

Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to modify the above invention suggested by Holzmann et al. and combining it with the invention disclosed by Chen. The results of this combination would lead to method and circuits for performing offline circuit trimming.

One of ordinary skill in the art would have been motivated to do this modification in order to improve adjusting process therefore increasing the efficiency of the circuit.

Regarding claim 21, Holzmann et al. in combination with Chen disclose all the limitations of the base claim. Holzmann et al. in combination with Chen, further disclose trimming circuit wherein each of said one or more trim bit subcircuits comprises: a current source connected to a selected one of upper and lower power supply rails; a switch connected to a remaining one of said upper and lower power supply rails; and a fuse connected between said current source and said switch (Holzmann C3 L25-45 and Fig 1A and C7 L53-67).

#### ***Citation of Pertinent Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to method and circuits for performing offline circuit trimming:

- a. U.S. Pat. No. 6,472,897 to Shyr et al., which discloses circuit and method for trimming integrated circuits.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Ortiz-Rodriguez whose telephone number is (571) 272-3747. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The central official fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P Picard can be reached on (703)308-0538. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carlos Ortiz-Rodriguez  
Patent Examiner  
Art Unit 2125

cror

March 17, 2005

  
**ALBERT W. PALADINI**  
**PRIMARY EXAMINER**